In [1]:
```
import pandas as pd
df = pd.read_csv('Items.csv')
df
```

Out[1]:

	ID	Name	catagery	price	quantity
0	1	Vegetables	Grade1	30	2
1	2	Fruits	Grade2	45	4
2	3	Rice	Grade3	69	6
3	4	Ice-creams	Grade4	58	5
4	5	Chocolate	Grade5	26	8
5	6	Roti	Grade6	54	7
6	7	Wheat	Grade7	25	9
7	8	Sugarcane	Grade8	36	3
8	9	Masala	Grade9	87	10
9	10	Sweets	Grade10	12	25

In [3]:
```
#filling empty cells
x = df["Name"].mode()[0]
df["Name"].fillna(x, inplace = True)
df
```

Out[3]:

	ID	Name	catagery	price	quantity
0	1	Vegetables	Grade1	30	2
1	2	Fruits	Grade2	45	4
2	3	Rice	Grade3	69	6
3	4	Ice-creams	Grade4	58	5
4	5	Chocolate	Grade5	26	8
5	6	Roti	Grade6	54	7
6	7	Wheat	Grade7	25	9
7	8	Sugarcane	Grade8	36	3
8	9	Masala	Grade9	87	10
9	10	Sweets	Grade10	12	25

In [5]:
```
y = df['price'].mean()
df['price'].fillna(y,inplace=True)
df
```

Out[5]:

	ID	Name	catagery	price	quantity
0	1	Vegetables	Grade1	30	2
1	2	Fruits	Grade2	45	4
2	3	Rice	Grade3	69	6
3	4	Ice-creams	Grade4	58	5
4	5	Chocolate	Grade5	26	8
5	6	Roti	Grade6	54	7
6	7	Wheat	Grade7	25	9
7	8	Sugarcane	Grade8	36	3
8	9	Masala	Grade9	87	10
9	10	Sweets	Grade10	12	25

In [6]:
```
z = df['quantity'].mean()
df['quantity'].fillna(z,inplace=True)
df
```

Out[6]:

	ID	Name	catagery	price	quantity
0	1	Vegetables	Grade1	30	2
1	2	Fruits	Grade2	45	4
2	3	Rice	Grade3	69	6
3	4	Ice-creams	Grade4	58	5
4	5	Chocolate	Grade5	26	8
5	6	Roti	Grade6	54	7
6	7	Wheat	Grade7	25	9
7	8	Sugarcane	Grade8	36	3
8	9	Masala	Grade9	87	10
9	10	Sweets	Grade10	12	25

In [7]:
```
#sum of quantity
sum = df['quantity'].sum()
print("sum of quantity: ",sum)
```

```
sum of quantity:  79
```

In [8]:
```
#average of price
avg = df['price'].mean()
print("Average prices:  ",avg)
```

```
Average prices:   44.2
```

In [10]:
```
#top selling
top = df['Name'].mode()[0]
print("Top selling product: ",top)
```

```
Top selling product:  Chocolate
```

In [11]:
```
#total sales
tot = df['quantity'].sum()
```

```
print("Toatal sales: ",tot)
```

```
Toatal sales:  79
```

In [14]:
```
#bus question
class Vehicle:
    def __init__(self,make,model,year):
        self.make=make
        self.model = model
        self.year = year
    def display_info(self):
        print(f"Make: {self.make}.\nModel: {self.model}.\nYear: {self.year}.")
class Bus(Vehicle):
    def __init__(self,make,model,year,seats):
        super().__init__(make,model,year)
        self.seats = seats
    def display_info(self):
        super().display_info()
        print(f"Number of seats: {self.seats}")
    def bus_fare(self,distance):
        fare_pkms = 5
        total_fare = fare_pkms*distance
        return total_fare
bus = Bus("Mahindra","Thar",2022,4)
bus.display_info()
print("Bus fare for 10kms: ",bus.bus_fare(10))
```

```
Make: Mahindra.
Model: Thar.
Year: 2022.
Number of seats: 4
Bus fare for 10kms:  50
```

In [ ]: